

# 299-307 John Street South & 97 St. Joseph's Drive

## Arborist Report and Tree Preservation Plan

City of Hamilton



Prepared for:  
Spallacci and Sons Limited  
c/o Urban Solutions Planning and Land Development Consultants Inc.

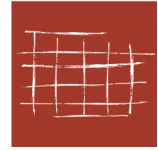
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Date:  
December 15, 2017

**ABOUD & ASSOCIATES INC.**  
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December 15, 2017

Our File No.: AA17-114A

Sent by email: cagro@urbansolutions.info

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c/o

Carmela Agro, Planning Technician  
Urban Solutions Planning & Land Development Consultants Inc.  
105 Main Street East, Suite 501  
Hamilton, ON L8N 1G6

**Re: Tree Protection Plan  
John Street Condos (299-307 John Street South & 97 St. Joseph's  
Drive)  
City of Hamilton**

Dear Ms. Agro:

We have completed our study of the above referenced project. This Tree Protection Plan has been prepared in fulfilment of the conditions outlined in the Niagara Escarpment Development Permit issued for the development, according to the requirements outlined in the City of Hamilton's *Tree Protection Guidelines – City Wide* (Revised October, 2010) and with reference to the City of Hamilton's Public Tree By-law (By-law No. 06-151).

The following attached documents are part of this investigation.

- *Appendix 1. Tree Inventory and Assessment Definitions*
- *Appendix 2. Detailed Tree Data*
- *Appendix 3. Limitations of this Tree Assessment*
- *Appendix 4. Protection of Migratory Birds and Development*
- *Drawing TPP1-2 Tree Preservation Plan and Details*

## 1. Introduction

### 1.1 Proposed Development and Existing Conditions

Spallacci and Sons Limited is proposing to build a high-density condominium complex on the properties at 299-307 John Street South and 97 St. Joseph's Drive in the City of Hamilton. The property measures approximately 130 metres deep x 70 metres wide (maximum distances) with a total measured area just over 8,500 m<sup>2</sup> (measured digitally). There is an existing apartment and parking lot on the properties, which are proposed to be demolished. The property has open-grown landscape trees as well as volunteers along the property lines.

### 1.2 Legislative Context

In cases where developments will impact existing trees, The City of Hamilton requires a Tree Preservation Plan prepared in accordance with the *Tree Protection Guidelines – City Wide* (Revised October, 2010) ('the Guidelines'). In addition, City of Hamilton By-law No. 06-151 of ('the Public Tree By-law') also outlines the protection given to trees located in the City's right of way and other municipally owned spaces.

Section 2.1 of the Guidelines outlines the four step process the City requires a project take in order to ensure private trees are protected. The four steps are a General Vegetation Inventory, a Tree Protection Plan (TPP), Implementation and a Landscape Plan. The first study to be undertaken is a General Vegetation Inventory, which identifies the areas to be studied further in the TPP. The TPP identifies individual trees to be preserved and protected from the proposed development. Once the TPP is approved by the City, the Implementation of the TPP can proceed, which is comprised of verifying the protection measures outlined in the TPP are installed prior to site grading and maintained throughout construction, a report that documents the tree protection, and the payment of a security deposit to the City. Finally, a Landscape Plan is submitted to the satisfaction of the City that shows the details of compensation plantings. Compensation for removed trees is set at a 1:1 ratio and a cash-in-lieu payment to the City, if the compensation targets cannot be met onsite.

The Public Tree By-law applies to municipally owned trees, including those in the road right of way. Paragraphs 9(1) and 9(2) of the Public Tree By-law state that anyone who damages or injures municipally owned trees "shall be subject to the regulations listed in the City of Hamilton Reforestation Policy – Municipally Owned Lands in addition to any necessary enforcement under this By-law" (Paragraph 9(1)) and required to pay restitution as outlined in the City of Hamilton Reforestation Policy – Municipally Owned Lands (Paragraph 9(2)).

In addition to the municipal by-laws, it is required by law in the province of Ontario to obtain the consent of any boundary tree's owned prior to injuring or removing that tree. Paragraph 10 of the Forestry Act, R.S.O. 1990, c. F.26 states that:

10. (2) Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands. 1998, c. 18, Sched. I, s. 21.
- (3) Every person who injures or destroys a tree growing on the boundary between adjoining lands without the consent of the land owners is guilty of an offence under this Act. 1998, c. 18, Sched. I, s. 21.

### 1.3 Study Terms

Due to the presence of trees on private property and municipally-owned property within the vicinity of the proposed development, a Tree Protection Plan is required prior to work commencing. Aboud & Associates has been retained to complete the Tree Protection Plan for this project.

## 2. Methodology

### 2.1 Site Context

The Site is an urban residential property with many trees of varying age and origin surrounding the existing apartment building and parking lot. The tree inventory and assessment was conducted by James Dennis, ISA Certified Arborist on August 17, 2017. The Plan of Survey by Ashenhurst Nouwens Limited (July 23, 2013) was used in the field to locate and inventory surveyed trees. Additional trees were located by Aboud & Associates in the field using field reference markers. The base plan for *Drawing TPP1* is from the Architectural Drawings by SRN Architects Inc., dated November 21, 2017.

### 2.2 Tree Inventory Requirements

Data for several categories of information must be collected for each tree in the study area as part of the Tree Protection Plan (Subsection 2.2.2 of the Guidelines). As such, the following data were collected for each tree:

- Species (botanical and common names)\*
- Diameter at breast height - DBH (cm)\*
- Crown Reserve (dripline) (m)
- Condition (Good, Fair, Poor, Dead)\*
- Recommendation based on Condition\*
- Recommendation based on Development Impacts\*
- Observations / comments

\* Categories for data collection required under the Guidelines.

*Appendix 1* provides a description of assessment methods and definitions of codes used in the Observations/Comments category. Recommendations to preserve or remove individual trees were assigned based on a tree's current condition and the expected impact from the construction. The final recommendation for each tree and other data listed above are provided in *Appendix 2*. Detailed rationale for the recommendations of select trees is given in Section 3.

We provide *Appendix 3 – Limitations of this Tree Assessment* to clarify what is reasonable and possible in our assessment of trees. *Appendix 4 – Protection of Migratory Birds and Development* is provided for reducing impacts to breeding birds.

## 3. Observations and Recommendations

### 3.1 Tree Inventory Data Summary

A total of 100 trees were recorded in the study area. Specific data for each individual tree are provided in *Appendix 2*. The locations, identification numbers, approximate crown reserves, and preservation recommendations of trees are shown on *Drawing TPP1*. The locations, identification numbers and preservation recommendations of trees are shown on *Drawing TPP1*.

The inventoried trees are a mix of 11 coniferous and deciduous species, which are generally either common landscape species or opportunistic species. The courtyard area of the existing apartment building contains the only Black Walnut (*Juglans nigra*), Paper Birch (*Betula papyrifera*) and Crimean Linden (*Tilia X Euchlora*) in the inventory, in addition to almost half of the Norway Maple (*Acer platanoides*) trees inventoried. All of the Honey Locust (*Gleditsia triacanthos* var. *Inermis*) occur adjacent the apartment building on the John Street side. All of the Colorado Blue Spruce (*Picea pungens* 'Glauca') inventoried occur between the gravel/asphalt parking lot to the north of the site and John Street. The property boundaries along Charlton Avenue East and between the subject property and Woolverton Park and 107 St. Joseph's Drive are treed with Tree of Heaven (*Ailanthus altissima*), White Mulberry (*Morus alba*) and Norway Maple. One offsite Austrian Pine (*Pinus nigra*), located in Woolverton Park, was also inventoried.

### 3.2 Recommendations for Preservation and Removal

#### 3.2.1 Trees Recommended for Preservation

It is recommended that 8 of the trees inventoried be preserved. These trees are in fair to good condition, and at most will be minimally impacted by the proposed development. Table A provides a summary of recommended action assigned to all inventoried trees.

Trees 20-26 and 50 are recommended for preservation despite the development encroaching within their crown reserves. The encroachments within the crown reserves are relatively minor, because the existing structures on the subject property have most likely limited the amount of root encroachment by these trees across the property line. On the subject property there are concrete walls supporting the parking superstructure and acting as retaining walls, which lie within 30 cm of the property line and act as root barriers to trees 20-26. For Tree 50, the proposed development may impact its roots. Similar to the conditions with Trees 20-26, the soil on the subject property adjacent the property line, being compacted or covered by asphalt, is not conducive to root proliferation. For this reason, the damage to roots is anticipated to be minor. For all of these trees, the proposed impact can be mitigated by careful treatment of the roots within the crown reserve as detailed in Section 3.3 of this report.

#### 3.2.2 Trees Recommended for Removal

Ninety-two (92) trees are recommended for removal due to their condition or the proposed development. Table A provides a summary of recommended action assigned to all inventoried trees.

**Table A.** Summary of Recommended Action Assigned to Trees

<b>Recommended Action</b>	<b>Based on Condition</b>	<b>Based on Development Impacts</b>	<b>Based on Condition AND Development Impacts</b>
Preserve	87	8	8
Remove	13	92	92
<b>Totals</b>	<b>100</b>	<b>100</b>	<b>100</b>

Thirteen (13) of the 92 trees recommended for removal are either in poor condition or dead and these trees are also in conflict with the current development. The main reason for recommending trees be removed due to the proposed development is that the development is

proposing excavation within the full extent of the property, as well as redevelopment along the right of ways at Charlton Avenue East and St. Joseph's Drive for vehicular access.

Municipal trees along the Charlton Avenue East right of way will need to be removed to accommodate the proposed development.

### **3.3 Protection of Trees Recommended for Preservation**

In order to preserve the identified onsite trees during and after construction, the following tree protection measures must be taken:

- Tree protection fencing (TPF) must be installed at the limit of work as specified in the TPF detail shown in *Drawing TPP1*;
- Where the development limit falls within the crown reserves of trees to be preserved, root pruning is recommended prior to earthworks by pre-staking the development limit, exposing roots (by air-spading/hand-digging with spades/hydro-vacuuming) along the development limit, cutting roots with appropriate tools (pruners, pole saws, or chainsaws as required), and covering cut roots and maintaining their moisture until backfilling with clean topsoil takes place;
- Root pruning within the crown reserves should be conducted or supervised by a Certified Arborist where the development encroaches within the driplines of trees recommended for preservation; and
- For trees that are at risk of being damaged due to the movement of machinery onsite, crown clearance pruning to arboricultural standards by a Certified Arborist is recommended prior to the beginning of construction.

## **4. Compensation**

The City of Hamilton requires compensation for all private trees removed, and approval by the City is required for the removal of municipal trees associated with "Planning and Development Projects", including the development of residential properties. For private trees, the Guidelines set the compensation ratio at 1:1, meaning 88 trees will have to be planted in compensation. No compensation schedule is associated with the removal of municipal trees. The details regarding species and locations of compensation plantings will be determined in the Landscape Plan, which will be submitted under separate cover. If 88 trees cannot be planted on the property, the City will accept cash-in-lieu payment, the amount of which will be determined by the City.

## 5. Conclusion

The proposed development at 299-307 John Street South and 97 St. Joseph's Drive requires a Tree Protection Plan to be submitted to, and approved by, the City of Hamilton as part of the Zoning Application process. Through field study of the onsite vegetation and analysis of the proposed development, eight of 100 trees are recommended for preservation. Trees recommended for removal will require 88 compensation tree plantings. These compensation plantings will be detailed in the Landscape Plan, submitted under separate cover.

**Report Prepared By:**

## **ABOUT & ASSOCIATES INC.**

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ISA Certified Arborist No. ON-1580A  
ISA TRAQ Certified  
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## APPENDIX 1. TREE INVENTORY AND ASSESSMENT DEFINITIONS

Note: Not all definitions may apply.

**DBH (cm):** Diameter at breast height, 1.4 m above ground, measured in centimeters. Two or more numbers denotes the DBH of each stem/trunk for trees with multiple stems/trunks.

**Height (metres):** Height of tree from ground to top of crown. Height is estimated from visual ground observations.

**Crown Reserve (metres):** Crown diameter (tree's canopy).

**Minimum Tree Protection Zone (MTPZ):** The minimum setback required to maintain the structural integrity of the tree's anchor roots, based on generally accepted arboricultural principles. If trees are protected to the TPZ then the tree's anchor root structure is expected to be maintained. Protection zone distances from: Tree Protection Policy and Specifications for Construction Near Trees (City of Toronto, June 2013).

**Biological Health:** Related to presence and extent of disease/disease symptoms and the vigour of the tree.

**H (High)** - No diseases/disease symptoms present, and moderate to high vigour.

**M (Moderate)** - Presence of minor diseases/disease symptoms, and/or moderate vigour.

**L (Low)** - Presence of major diseases/disease symptoms, (i.e., extensive crown dieback), and/or poor vigour.

A further rating may be assigned of M(L) = Low side of Moderate, M(H) = High side of Moderate.

**Structural Condition:** Related to defects in a tree's structure, (i.e., lean, codominant trunks).

**H (High)** - No structural defects, well-developed crown.

**M (Moderate)** - Presence of minor structural defects.

**L (Low)** - Presence of major structural defects.

A further rating may be assigned of M(L) = Low side of Moderate, M(H) = High side of Moderate.

**Development Tolerance:** Related to the tree's combined overall rating of biological health and structural condition and the general tolerance to the development of each species. In addition to the health and condition of a tree, species type plays an important role in determining how a tree will respond to development pressures such as root severance, flooding, soil compaction and increases in light or heat due to the removal of other trees.

**H (High)** - Biological Health rating of greater than moderate AND Structural Condition rating greater than moderate, and high species tolerance to development (e.g. Biological Health = M(H) to H AND Structural Condition = MH to H).

**M (Moderate)** - Biological Health rating of moderate AND Structural Condition rating of moderate, and a moderate relative species tolerance to development.

**L (Low)** - Biological Health rating of less than moderate OR Structural Condition rating of less than moderate and a relatively low species tolerance to development.

### Ownership:

**Private Tree:** Tree trunk located completely within the property boundary of the subject property.

**Offsite Tree:** Tree trunk located on private property completely outside of the property boundary of the subject property.

**Municipal Tree:** Tree is located on the property of the municipality/region, e.g., within Right-of-Way.

**Shared Tree:** Tree shared between the subject property and adjacent private or public property.

**Recommended Action:** A recommendation of the following three categories is assigned to preserve or remove a tree:

i) The tree's current biological health and structural condition

ii) The anticipated impacts from proposed development

iii) The summary of the previous two categories. Note: Only trees having a recommendation of preserve for both health and structure, and impacts from the proposed development are assigned a final recommendation of preserve.

**P (Preserve)** - Tree has a moderate to high biological health AND moderate to high structural condition, AND is likely to survive impact from the proposed development (if present). The tree is likely to survive for at least 3 to 5 years.

**R (Remove)** - Tree has low biological health, AND/OR low structural condition, AND/OR will not survive the proposed development impacts (if present). The tree is not likely to survive more than 1-3 years.

**C (Conditional)** - In some situations a tree's preservation or removal is related to potential relocation/modification of the limit of construction, and/or known arboricultural treatments that will likely improve the biological health and/or structural condition of the tree. This may include review of a tree's condition, e.g., roots, at time of construction/excavation.

**Compensation Required:** Trees regulated under the City of Brampton's *Guidelines for the Assessment of Existing Tableland Vegetation* (October 2014) that are destroyed or injured are to be replaced. Other requirements and alternatives may apply as per the Guidelines. Trees are to be compensated for at a 3:1 ratio. Compensation is required for all healthy trees greater than 15cm DBH, including non-native trees.



## APPENDIX 1. TREE INVENTORY AND ASSESSMENT DEFINITIONS

Note: Not all definitions may apply.

### Codes of Damage Descriptions

BA - branch attachment poor  
BB - branches broken  
BC - bark crack  
BD - bark dead  
BI - bark included  
BS - basal trunk sprouts  
CB - crown broken  
CD - crown dieback  
CK - canker (abnormal growth from disease or damage)  
CL - crown live, CL20 - 20% live crown  
CS - crown sprouts  
CT - crown thin (having reduced foliage)  
CU - crown unbalanced  
CV - crown vines  
DW - deadwood  
FB - fungal bodies present  
LC - leaves chlorotic (yellow)  
LD - leaves defoliated  
LP - leader poor/problem  
MB - multi-branched node of limbs on stem  
ML - multiple leaders  
PH - planted high  
PL - planted low  
PP - past pruning problems  
RC - root crown damage/abnormality  
RE - roots exposed  
RG - roots girdling  
SC - stems co-dominant  
SG - stem girdled  
ST - soil on trunk  
TB - trunk bent  
TC - trunk cavity  
TK - trunk crooked  
TD - trunk decay  
TE - trunk base enlarged abnormally  
TF - trunk basal flair lacking / abnormal  
TG - trunk/stem girdling  
TL - trunk lean (L < 5°, (M 5-20°), (H > 20°)  
TM - trunks multiple from at or below ground level  
TS - trunk split  
TT - trunk twisted  
TW - trunk wound  
WW - wet wood

### QUANTIFIED CONDITIONS (defects, diseases)

L (low, minor), M (moderate), H (high, severe)  
E.G. CT(H) = severe crooked trunk  
TD(L) = minor trunk decay  
TF(H) = severely poor basal trunk flare

### CARDINAL COORDINATES (N, S, E, W)

e.g., LN(L-S) = minor lean to the south

### Codes of Recommendations

A - Add mulch  
B - Remove attachments (burlap, wire, stake, guard)  
C - Cable  
F - Fertilize  
L - lower soil level  
M - Monitor  
N - None Needed  
P - Prune  
R - Remove  
S - Soil bulk density (compaction) lower  
V - soil volume (increase)  
W - Water  
~ - Denotes approximate

### Life Expectancy

1 - Less than 5 years  
2 - 5 to 10 years  
3 - 11 to 20 years  
4 - 21 to 50 years  
5 - 51 to 100 years  
6 - 101 to 200 years

**Priority:** An action priority schedule (i.e. general timing) to provide arboricultural treatment(s).

E - Extremely Urgent (within a week)  
U - Urgent (within 3 months)  
H - High (within a year)  
M - Moderate (within 3 years)  
L - Low (little or no action required for at least 5 years)

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Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: Private, <b>Q</b> ffsite, <b>M</b> unicipal, <b>S</b> hared	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
1	<i>Acer platanoides</i> Norway Maple	34	2.4	12	Fair	P	P	R	RD	Decay in trunk suspected
2	<i>Acer platanoides</i> Norway Maple	56	3.6	12	Good	P	P	R	RD	
3	<i>Acer platanoides</i> Norway Maple	32	2.4	12	Fair	P	P	R	RD	
4	<i>Acer platanoides</i> Norway Maple	47	3.0	14	Fair	P	P	R	RD	
5	<i>Tilia x Euchlora</i> Crimean Linden	41	3.0	9	Fair	P	P	R	RD	Codominant leaders
6	<i>Acer platanoides</i> Norway Maple	48	3.0	14	Good	P	P	R	RD	
7	<i>Acer platanoides</i> Norway Maple	20	2.4	8	Good	P	P	R	RD	
8	<i>Acer platanoides</i> Norway Maple	14	2.4	7	Good	P	P	R	RD	
9	<i>Morus alba</i> White Mulberry	24	2.4	10	Good	P	P	R	RD	Weeping trunk wound (minor)
10	<i>Ailanthus altissima</i> Tree Of Heaven	23	2.4	8	Fair	P	P	R	RD	Past branch failure (minor)
11	<i>Ailanthus altissima</i> Tree Of Heaven	27	2.4	10	Good	P	P	R	RD	
12	<i>Ailanthus altissima</i> Tree Of Heaven	34	2.4	12	Good	P	P	R	RD	
13	<i>Ailanthus altissima</i> Tree Of Heaven	27	2.4	10	Good	P	P	R	RD	
14	<i>Acer platanoides</i> Norway Maple	47	3.0	12	Fair	P	P	R	RD	Codominant stems
15	<i>Ailanthus altissima</i> Tree Of Heaven	81	5.4	14	Fair	P	P	R	RD	Growing around fence
16	<i>Juglans nigra</i> Black Walnut	45	3.0	12	Fair	P	P	R	RD	Trunk wound (moderate); Decay (minor)
17	<i>Acer platanoides</i> Norway Maple	27	2.4	10	Good	P	P	R	RD	
18	<i>Betula papyrifera</i> Paper Birch	25	2.4	8	Good	P	P	R	RD	
19	<i>Acer platanoides</i> Norway Maple	23	2.4	8	Good	P	P	R	RD	
20	<i>Ailanthus altissima</i> Tree Of Heaven	19	2.4	9	Good	O	P	P	P	
21	<i>Ailanthus altissima</i> Tree Of Heaven	54	3.6	14	Fair	O	P	P	P	Codominant leaders
22	<i>Morus alba</i> White Mulberry	49	3.0	14	Fair	O	P	P	P	Codominant stems

Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: Private, <b>Q</b> ffsite, <b>M</b> unicipal, <b>S</b> hared	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
23	<i>Ailanthus altissima</i> Tree Of Heaven	44	3.0	12	Fair	O	P	P	P	Codominant leaders
24	<i>Acer platanoides</i> Norway Maple	20	2.4	8	Fair	O	P	P	P	Codominant stems
25	<i>Ailanthus altissima</i> Tree Of Heaven	23	2.4	8	Good	O	P	P	P	
26	<i>Ailanthus altissima</i> Tree Of Heaven	18	2.4	8	Good	O	P	P	P	
27	<i>Morus alba</i> White Mulberry	31	2.4	14	Fair	P	P	R	RD	Trunk lean (severe)
28	<i>Morus alba</i> White Mulberry	24	2.4	14	Fair	P	P	R	RD	Codominant stems; Trunk lean (severe)
29	<i>Ailanthus altissima</i> Tree Of Heaven	28	2.4	14	Good	P	P	R	RD	
30	<i>Ailanthus altissima</i> Tree Of Heaven	23	2.4	12	Good	P	P	R	RD	
31	<i>Ailanthus altissima</i> Tree Of Heaven	33	2.4	10	Fair	P	P	R	RD	Unbalanced crown (severe)
32	<i>Thuja occidentalis</i> Eastern White Cedar	11	2.4	3	Good	P	P	R	RD	
33	<i>Thuja occidentalis</i> Eastern White Cedar	13	2.4	4	Good	P	P	R	RD	
34	<i>Thuja occidentalis</i> Eastern White Cedar	14	2.4	4	Fair	P	P	R	RD	
35	<i>Thuja occidentalis</i> Eastern White Cedar	14	2.4	5	Fair	P	P	R	RD	
36	<i>Ailanthus altissima</i> Tree Of Heaven	28	2.4	14	Good	P	P	R	RD	
37	<i>Ailanthus altissima</i> Tree Of Heaven	34	2.4	12	Fair	P	P	R	RD	
38	<i>Ailanthus altissima</i> Tree Of Heaven	41	3.0	14	Good	P	P	R	RD	
39	<i>Ailanthus altissima</i> Tree Of Heaven	43	3.0	10	Fair	P	P	R	RD	Codominant leaders; Crown dieback (moderate)
40	<i>Ailanthus altissima</i> Tree Of Heaven	31	2.4	10	Good	P	P	R	RD	
41	<i>Ailanthus altissima</i> Tree Of Heaven	31	2.4	10	Fair	P	P	R	RD	Growing through fence
42	<i>Ailanthus altissima</i> Tree Of Heaven	26	2.4	10	Good	P	P	R	RD	
43	<i>Ailanthus altissima</i> Tree Of Heaven	30	2.4	12	Fair	P	P	R	RD	Growing through fence
44	<i>Ailanthus altissima</i> Tree Of Heaven	34	2.4	12	Good	P	P	R	RD	

Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: Private, Offsite, Municipal, Shared	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
45	<i>Ailanthus altissima</i> Tree Of Heaven	20	2.4	9	Good	P	P	R	RD	
46	<i>Ailanthus altissima</i> Tree Of Heaven	31	2.4	10	Good	P	P	R	RD	
47	<i>Ailanthus altissima</i> Tree Of Heaven	33	2.4	12	Good	P	P	R	RD	
48	<i>Ailanthus altissima</i> Tree Of Heaven	19	2.4	12	Poor	P	R	R	RCD	Growing around fence post
49	<i>Ailanthus altissima</i> Tree Of Heaven	19	2.4	8	Good	P	P	R	RD	
50	<i>Pinus nigra</i> Austrian Pine	23	2.4	8	Good	P	P	P	P	Offsite, location estimated
51	<i>Ailanthus altissima</i> Tree Of Heaven	25	2.4	8	Fair	P	P	R	RD	
52	<i>Ailanthus altissima</i> Tree Of Heaven	23	2.4	10	Poor	P	R	R	RCD	Growing through fence at two points in trunk
53	<i>Ailanthus altissima</i> Tree Of Heaven	28	2.4	12	Good	P	P	R	RD	
54	<i>Ailanthus altissima</i> Tree Of Heaven	28	2.4	10	Good	P	P	R	RD	
55	<i>Ailanthus altissima</i> Tree Of Heaven	34	2.4	12	Good	P	P	R	RD	
56	<i>Ailanthus altissima</i> Tree Of Heaven	47	3.0	14	Fair	P	P	R	RD	Codominant stems
57	<i>Ailanthus altissima</i> Tree Of Heaven	34	2.4	10	Fair	M	P	R	RD	Smaller stem is acer platanoides
58	<i>Ailanthus altissima</i> Tree Of Heaven	54	3.6	12	Fair	M	P	R	RD	Growing through fence
59	<i>Ailanthus altissima</i> Tree Of Heaven	48	3.0	12	Good	M	P	R	RD	
60	<i>Ailanthus altissima</i> Tree Of Heaven	24	2.4	10	Poor	M	R	R	RCD	Crown dieback (severe)
61	<i>Ailanthus altissima</i> Tree Of Heaven	20	2.4	8	Poor	M	R	R	RCD	Crown dieback (severe)
62	<i>Ailanthus altissima</i> Tree Of Heaven	17	2.4	8	Poor	M	R	R	RCD	Crown dieback (severe)
63	<i>Ailanthus altissima</i> Tree Of Heaven	16	2.4	6	Good	M	P	R	RD	
64	<i>Acer platanoides</i> Norway Maple	14	2.4	6	Poor	P	R	R	RCD	Growing through fence
65	<i>Acer platanoides</i> Norway Maple	15	2.4	8	Fair	M	P	R	RD	
66	<i>Acer platanoides</i> Norway Maple	15	2.4	6	Fair	P	P	R	RD	

Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: Private, <b>Offsite</b> , Municipal, <b>Shared</b>	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
67	<i>Acer platanoides</i> Norway Maple	17	2.4	8	Good	M	P	R	RD	
68	<i>Acer platanoides</i> Norway Maple	14	2.4	7	Fair	M	P	R	RD	
69	<i>Ailanthus altissima</i> Tree Of Heaven	14	2.4	10	Fair	P	P	R	RD	Coppice growth from removed tree
70	<i>Acer platanoides</i> Norway Maple	24	2.4	7	Good	P	P	R	RD	
71	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	8	1.8	3	Fair	P	P	R	RD	
72	<i>Acer platanoides</i> Norway Maple	15	2.4	7	Fair	P	P	R	RD	
73	<i>Acer platanoides</i> Norway Maple	24	2.4	10	Fair	P	P	R	RD	Codominant leaders
74	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	19	2.4	6	Good	P	P	R	RD	
75	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	12	2.4	4	Poor	P	R	R	RCD	
76	<i>Acer platanoides</i> Norway Maple	13	2.4	4	Poor	P	R	R	RCD	
77	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	14	2.4	5	Fair	P	P	R	RD	
78	<i>Picea</i> sp. Spruce	14	2.4	4	Dead	P	R	R	RCD	
79	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	21	2.4	4	Poor	P	R	R	RCD	Crown dieback (severe)
80	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	18	2.4	6	Poor	P	R	R	RCD	
81	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	15	2.4	5	Fair	P	P	R	RD	
82	<i>Acer platanoides</i> Norway Maple	14	2.4	6	Good	P	P	R	RD	
83	<i>Acer platanoides</i> Norway Maple	12	2.4	7	Fair	P	P	R	RD	
84	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	22	2.4	6	Good	P	P	R	RD	
85	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	11	2.4	4	Fair	P	P	R	RD	
86	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	13	2.4	4	Good	P	P	R	RD	
87	<i>Acer platanoides</i> Norway Maple	24	2.4	8	Good	P	P	R	RD	
88	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	16	2.4	4	Good	P	P	R	RD	

Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: Private, <b>Offsite</b> , Municipal, <b>Shared</b>	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
89	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	14	2.4	5	Good	P	P	R	RD	
90	<i>Acer platanoides</i> Norway Maple	14	2.4	5	Poor	P	R	R	RCD	
91	<i>Acer platanoides</i> Norway Maple	17	2.4	7	Fair	P	P	R	RD	
92	<i>Picea</i> sp. Spruce	10	1.8	2	Dead	P	R	R	RCD	
93	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	14	2.4	4	Fair	P	P	R	RD	
94	<i>Gleditsia triacanthos</i> var. <i>inermis</i> Honey Locust (Thornless)	28	2.4	8	Good	P	P	R	RD	
95	<i>Gleditsia triacanthos</i> var. <i>inermis</i> Honey Locust (Thornless)	28	2.4	10	Good	P	P	R	RD	
96	<i>Gleditsia triacanthos</i> var. <i>inermis</i> Honey Locust (Thornless)	26	2.4	18	Good	P	P	R	RD	
97	<i>Gleditsia triacanthos</i> var. <i>inermis</i> Honey Locust (Thornless)	31	2.4	10	Good	P	P	R	RD	
98	<i>Juglans nigra</i> Black Walnut	23	2.4	7	Fair	P	P	R	RD	
99	<i>Ailanthus altissima</i> Tree Of Heaven	31	2.4	8	Fair	P	P	R	RD	
100	<i>Acer platanoides</i> Norway Maple	47	3.0	12	Fair	P	P	R	RD	Root damage (moderate); Crown dieback (minor)

Tree No.	Tree Species	DBH (cm) <sup>1,2,3</sup>	Minimum Tree Protection Zone (m) (diameter) <sup>4</sup>	Crown Reserve est. (m)	Condition Rating	Location: <b>Private</b> , <b>Offsite</b> , <b>Municipal</b> , <b>Shared</b>	Rec. Action - Based on Condition	Rec. Action - Based on Development	Final Recommendation	Comments / Observations
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Private (On Site) Trees	83									
Private (Off Site) Trees	7									
Municipal Trees	10									
Shared Trees	0									
<b>Subtotal</b>	<b>100</b>									
Preserve Tree Based on Health & Structure		87								
Remove Tree Based on Health & Structure		13								
<b>Subtotal</b>	<b>100</b>									
Preserve Tree Based on Development Impacts			8							
Remove Tree Based on Development Impacts			92							
<b>Subtotal</b>	<b>100</b>									
Final Recommendation: Preserve (P)									8	
Final Recommendation: Remove due to Condition (RC)									0	
Final Recommendation: Remove due to Development (RD)									79	
Final Recommendation: Remove due to Condition and Development (RCD)									13	
<b>Subtotal</b>	<b>100</b>								<b>100</b>	

1 DBH (Diameter at breast height ): Measurement of tree stem diameter at 1.4 meters above ground.

2 - Denotes Estimated

3 [ ] Denotes Multiple Stems

4 Minimum Tree Protection Zones per City of Toronto "Tree Protection Policy and Specifications for Construction Near Trees (March 2016)"

### **APPENDIX 3. LIMITATIONS OF TREE ASSESSMENT**

It is the policy of Aboud & Associates Inc. to attach the following clause regarding limitations. We do this to ensure that developers, agencies, municipalities and owners are clearly aware of what is technically and professionally realistic in retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack and crown dieback, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy unless stated otherwise within the report, no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of the inspection.



## APPENDIX 4. PROTECTION OF MIGRATORY BIRDS AND DEVELOPMENT

Most species of birds in Ontario are protected under the federal Migratory Birds Convention Act, 1994 (MBCA) or the provincial Fish and Wildlife Conservation Act, 1997. The “incidental take” of migratory bird nests or the disturbance, destruction or taking of the nest of a migratory bird are prohibited under section 6 of the *Migratory Bird Regulations* (MBRs), under the authority of the MBCA. “Incidental take” is defined as the harming of migratory bird nests due to actions such as construction activities. No permit can be issued for the incidental take of migratory birds or their nests as a result of economic activities.

The provincial Fish and Wildlife Conservation Act, 1997, provides protection for some species excluded from the MBCA, including raptors, gamebirds and specially protected birds. Under the Act (Section 7 (1)) a person shall not destroy, take or possess the nest or eggs of a bird that belongs to a species that is wild by nature. With the exception of the nest or eggs of an American crow, brown-headed cowbird, common grackle, house sparrow, red-winged blackbird or starling (Section 7(2)).

Project construction, operation or maintenance activities such as vegetation clearing, tree removal/harvesting, site grubbing, site access, excavation and stockpiling of soil/fill could result in the incidental take of migratory birds or their nests if conducted in migratory bird habitat. Construction activities could also disturb nearby breeding birds and disrupt breeding. It is the proponent’s responsibility to meet the requirements of the MBRs and should projects or activities result in the contravention of the MBRs, prosecution under the MBCA may be initiated.

In order to ensure compliance with the MBRs, Aboud & Associates recommends the following:

1. Activities resulting in the disturbance, destruction or removal of potential breeding bird habitat should, where possible, not take place during the General Nesting Period as outlined by Environment Canada (2014). The General Nesting Period is identified in ‘Environment Canada’s Avoidance Guidelines for Incidental Take’ (2014) as the period between the end of March and August 31 in Nesting Zones C1 and C2 in Ontario, located in the Lower Great Lakes/St. Lawrence Plain (Bird Conservation Region (BCR) 13).
2. When it is absolutely necessary that work must take place during the General Nesting Period, a qualified wildlife biologist must carry out a comprehensive survey to identify areas on the subject property where birds are building nests, incubating eggs, rearing young, etc. All disruptive activities in the nesting area should be halted and identified nests should be protected with a buffer (i.e. nest protection zone/no disturbance zone) appropriate for the species, the disturbance intensity level and the surrounding habitat. Disruptive activities can continue inside the buffered area once the biologist has deemed that fledglings have naturally left the vicinity of the nest.
3. Disruptive activities taking place outside of the General Nesting Period can be preceded by an assessment by a qualified wildlife biologist to ensure that the identification of stick nests of owls and raptors is undertaken in suitable habitat. Most raptor species, with the exception of species protected under the ESA are excluded from the MBCA; as a result, the nesting period for this group is not included under Environment Canada’s general nesting periods.

### References:

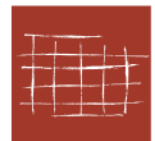
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Fish and Wildlife Conservation Act, 1997.

Migratory Birds Convention Act, 1994.

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